

DETAILED ACTION

Examiner Amendments

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.
2. Authorization for this examiner's amendment was given in a telephone interview with Applicant's representative Artem Sokolov on 10/28/2009.
3. The application has been amended as follows:
In the Abstract of the specifications:

- Change the Abstract to the following ---

The present invention provides a calibrating method of an array antenna transceiver for performing multicarrier transmission capable of minimizing the increase of a transceiver size and a signal processing load and keeping a certain calibration accuracy. A method of calibrating a transmission route using an array antenna transceiver for performing broadband transmission by a multicarrier includes grouping all subcarriers into a plurality of subcarrier groups and calibrating a transmission route for each group. ---

Allowable Subject Matter

4. Claims 1, 3-12, 14-22 and 25 are allowed.
5. The following is an examiner's statement of reasons for allowance.

- The prior art fails to teach an apparatus of Claims 1 and 12 that specifically comprises the following:

- The instant application is deemed to be directed to a non-obvious improvement over the admitted prior art of the instant application and the invention patented in Pat. No. US 7,076,168, US 7,072,693, US 7,028,425 and US 5,960,330.

The improvement comprises:

With regard Claims 1 and 12, "demodulation symbol area determining means for determining an area to which each demodulation result belongs on a previously divided I/Q coordinate plane by receiving a transmission route number, subcarrier number, and normalized demodulation symbol point (phase/amplitude information) output from said demodulation result processing means and outputting the determination result, calibration subcarrier selecting means for selecting one transmission route number and subcarrier number closest to the medium value in a area out of demodulation symbol point (phase/amplitude information) group classified every area output from said demodulation symbol area determining means and outputting the determination results, calibration control means for outputting a transmission route number and subcarrier number selected every area output from said calibration subcarrier selecting means and outputting a calibration mode change

signal for changing calibration modes," as recited in combination with other limitation in claim 1 and 12, respectively.

6. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ted M. Wang whose telephone number is (571) 272-3053. The examiner can normally be reached on M-F, 7:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chieh Fan can be reached on 571-272-3042. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at (866) 217-9197 (toll-free).

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